

Supplementary Table S3. Analysis of FBE with three additive susceptibility types

A. No polygenic component				
Parameters	Environmental no transmission	Mendelian additive	General (τ_{AA} , τ_{BB})	General (τ_{AA} , τ_{AB} , τ_{BB})
β_{AA} (SE)	-4.58 (0.14)	1.93 (0.57)	-2.21 (0.28)	-0.66 (0.41)
β_{AB} (SE)	-4.58 (0.14)	-1.96 (0.32)	-4.95 (0.24)	-3.49 (0.30)
β_{BB} (SE)	-4.58 (0.14)	-5.87 (0.41)	-7.69 (0.48)	-6.31 (0.47)
ξ_{sex}^* (SE)	-1.11 (0.22)	-1.19 (0.25)	-1.17 (0.24)	-1.15 (0.24)
$\xi_{founder}^\dagger$ (SE)	-1.72 (0.33)	-1.43 (0.36)	-5.21 (0.52)	-0.59 (0.39)
q_A		2.08×10^{-3}	6.02×10^{-3}	6.50×10^{-3}
τ_{AA}		1	1	1
τ_{AB}		0.5	0	0
τ_{BB}		0	1	0.96
-2ln(L)	1359.45	1301.92	1290.69	1285.92
d.f.‡	3	5	7	8
p -value¶	1.88×10^{-14}	4.67×10^{-4}	0.030	
p -value#	4.15×10^{-14}	0.001		
AIC	1365.45	1311.92	1300.69	1297.92
B. Three polygenic loci				
Parameters	Environmental plus polygenic	Mendelian additive	General (τ_{AA} , τ_{BB})	General (τ_{AA} , τ_{AB} , τ_{BB})
β_{AA} (SE)	147.46 (3.5)	2.28 (0.59)	2.28 (0.62)	-0.66 (0.41)
β_{AB} (SE)	65.14 (12.5)	-2.22 (0.31)	-2.22 (0.31)	-3.49 (0.30)
β_{BB} (SE)	-17.17§	-6.72 (0.62)	-6.72 (0.64)	-6.31 (0.47)
ξ_{sex}^* (SE)	-1.49 (0.33)	-1.30 (0.28)	-1.30 (0.28)	-1.15 (0.24)
$\xi_{founder}^\dagger$ (SE)	-36.49§	-1.29 (0.39)	-1.29 (0.39)	-0.59 (0.39)
σ_3^2 (SE)	0.93 (0.41)	1.16 (0.49)	1.16 (0.50)	10^{-5}
q_A	1.57×10^{-3}	1.79×10^{-3}	1.79×10^{-3}	6.50×10^{-3}
τ_{AA}		1	1	0.04
τ_{AB}		0.5	0.5	1
τ_{BB}		0	0	0
-2ln(L)	1077.57	1020.10	1020.10	1015.66
d.f.‡	6	6	8	9
p -value¶	3.32×10^{-13}	0.118	0.035	
p -value#	5.47×10^{-13}	0.750		
AIC	1089.57	1032.10	1032.10	1027.66

* Sex value for male is 0 and for female is 1

† Founder value for founder is 1 and for non-founder is 0

‡ Number of functionally independent parameters estimated

¶ Compared with the general model (τ_{AA} , τ_{AB} , τ_{BB})

Compared with the homogeneous general model (τ_{AA} , τ_{BB})

§ Standard errors of the estimates cannot be computed due to a flat likelihood